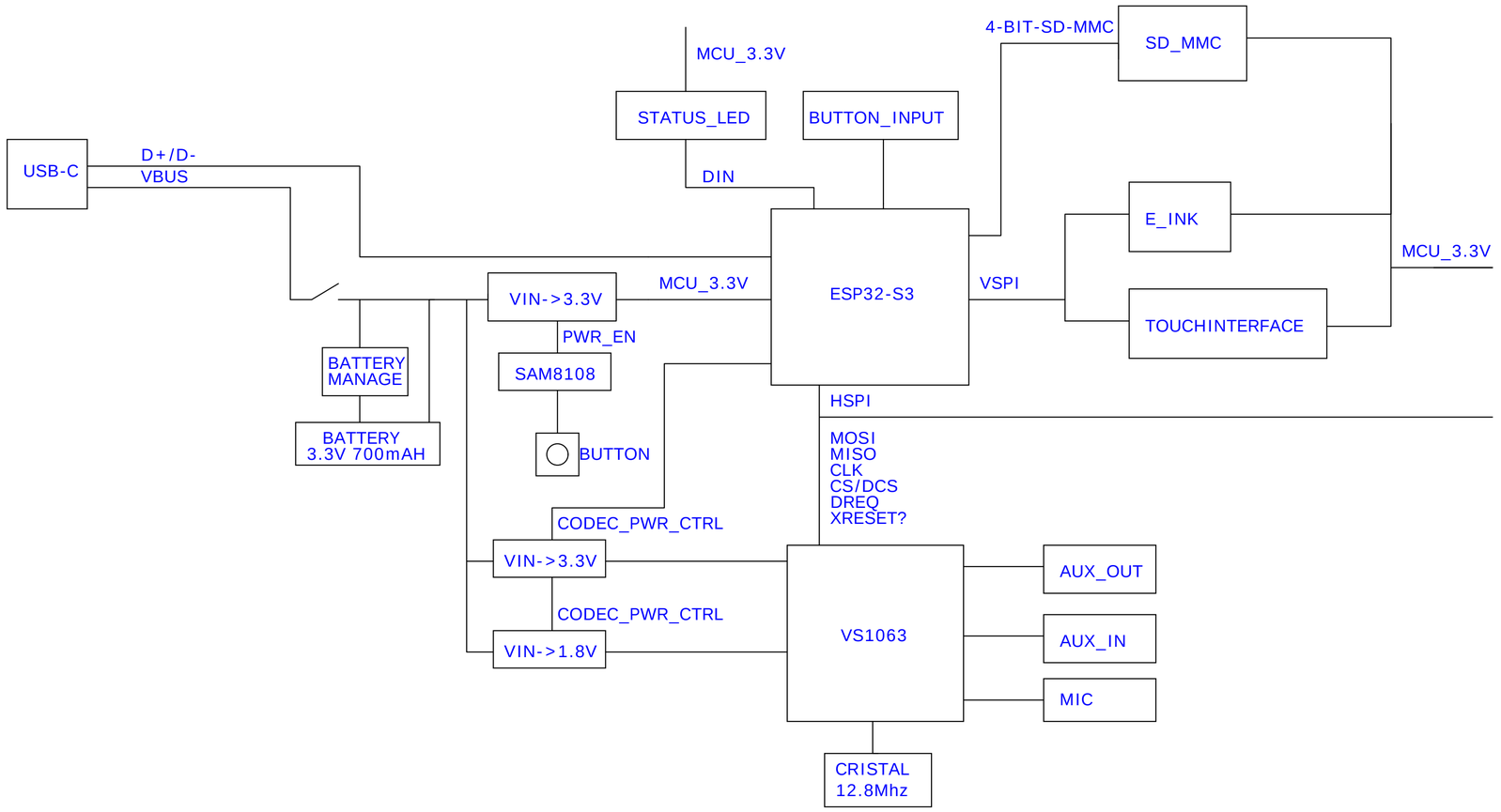
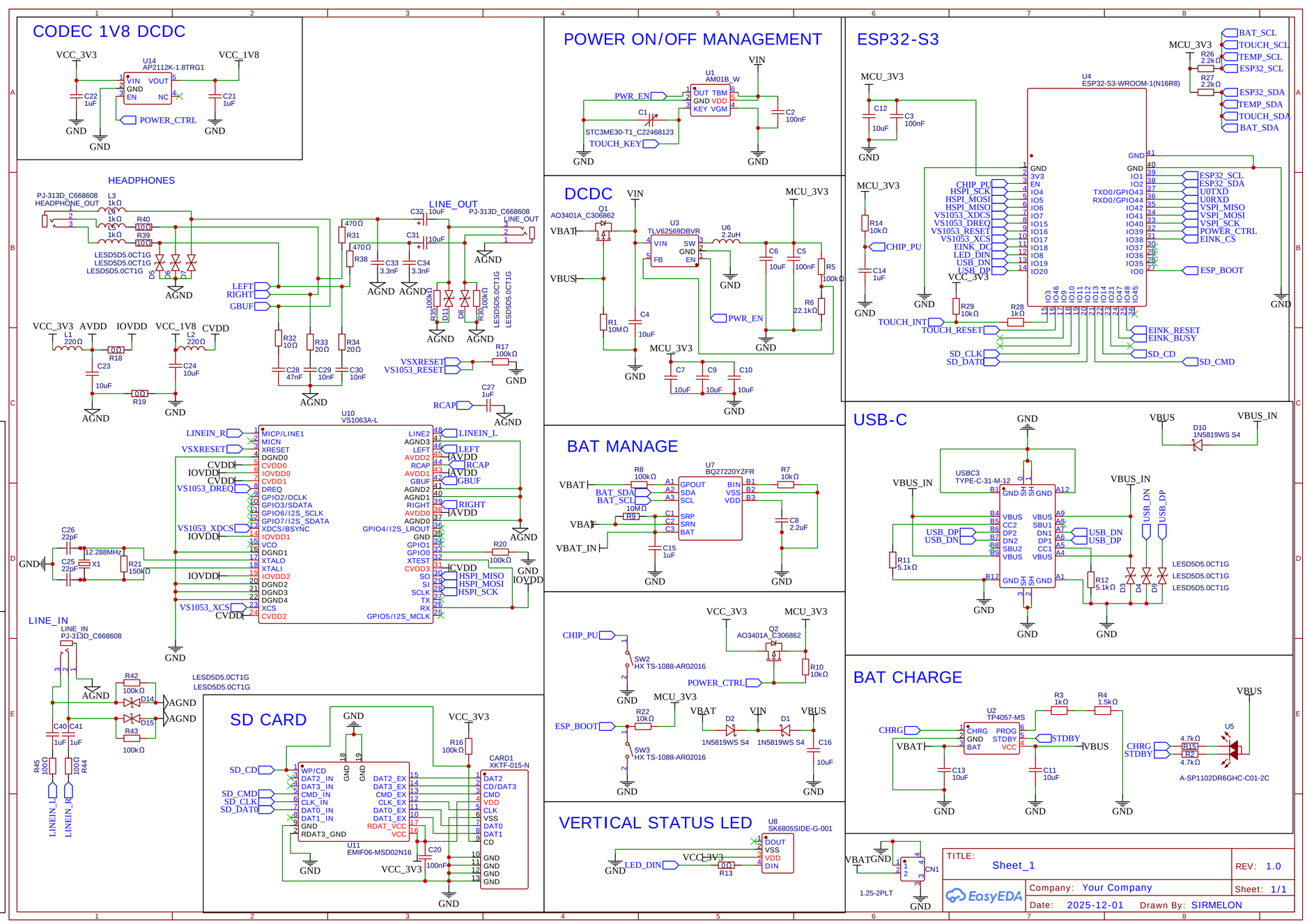

MCU_3.3V
4-BIT-SD-MMC
SD_MMC
STATUS_LED
BUTTON_INPUT
USB-C
D+/D-
VBUS
DIN
E_INK
MCU_3.3V
VIN->3.3V
MCU_3.3V
ESP32-S3
VSPI
TOUCHINTERFACE
PWR_EN
BATTERY MANAGE
SAM8108
HSPI
BATTERY 3.3V 700mAH
BUTTON
MOSI
MISO
CLK
CS/DCS
DREQ
XRESET?
CODEC_PWR_CTRL
VIN->3.3V
AUX_OUT
CODEC_PWR_CTRL
VS1063
AUX_IN
VIN->1.8V
MIC
CRISTAL 12.8Mhz


CODEC 1V8 DCDC
VCC_3V3
VCC_1V8
U14
AP2112K-1.8TRG1
VIN
VOUT
GND
EN
NC
C22 1uF
C21 1uF
POWER_CTRL
GND
HEADPHONES
PJ-313D_C668608
HEADPHONE_OUT
L3 1kΩ
L5 1kΩ
R40 100Ω
R39 100Ω
LESD5D5.0CT1G
LESD5D5.0CT1G
LESD5D5.0CT1G
D5
D6
D7
LINE_OUT
PJ-313D_C668608
LINE_OUT
C32 10uF
C31 10uF
470Ω
R31
470Ω
R38
C33 3.3nF
C34 3.3nF
AGND
LEFT
RIGHT
GBUF
R32 10Ω
R33 20Ω
R34 20Ω
C28 47nF
C29 10nF
C30 10nF
R35 100kΩ
R36 100kΩ
D11
D8
LESD5D5.0CT1G
LESD5D5.0CT1G
VCC_3V3
AVDD
IOVDD
VCC_1V8
CVDD
L1 220Ω
L2 220Ω
R18 0Ω
C23 10uF
C24 10uF
R19 0Ω
R17 100kΩ
VSXRESET
VS1053_RESET
RCAP
C27 1uF
U10
VS1063A-L
LINEIN_R
VSXRESET
VS1053_DREQ
VS1053_XDCS
VS1053_XCS
MICP/LINE1
MICN
XRESET
DGND0
CVDD0
IOVDD0
CVDD1
DREQ
GPIO2/DCLK
GPIO3/SDATA
GPIO6/I2S_SCLK
GPIO7/I2S_SDATA
XDCS/BSYNC
IOVDD1
VCO
DGND1
XTALO
XTALI
IOVDD2
DGND2
DGND3
DGND4
XCS
CVDD2
LINE2
AGND3
LEFT
AVDD2
RCAP
AVDD1
GBUF
AGND2
AGND1
RIGHT
AVDD0
AGND0
GPIO4/I2S_LROUT
GND
GPIO1
GPIO0
XTEST
CVDD3
SO
SI
SCLK
TX
RX
GPIO5/I2S_MCLK
LINEIN_L
AVDD
RCAP
AVDD
GBUF
RIGHT
AVDD
AGND
R20 100kΩ
GND
IOVDD
HSPI_MISO
HSPI_MOSI
HSPI_SCK
C26 22pF
C25 22pF
X1 12.288MHz
R21 150kΩ
GND
LINE_IN
LINE_IN
PJ-313D_C668608
R42 100kΩ
R43 100kΩ
D14
D15
LESD5D5.0CT1G
LESD5D5.0CT1G
C40 1uF
C41 1uF
R45 100Ω
R44 100Ω
LINEIN_L
LINEIN_R
SD CARD
GND
VCC_3V3
R16 100kΩ
SD_CD
SD_CMD
SD_CLK
SD_DAT0
WP/CD
DAT2_IN
DAT3_IN
CMD_IN
CLK_IN
DAT0_IN
DAT1_IN
GND
RDAT3_GND
DAT2_EX
DAT3_EX
CMD_EX
CLK_EX
DAT0_EX
DAT1_EX
RDAT_VCC
VCC
U11
EMIF06-MSD02N16
C20 100nF
CARD1
XKTF-015-N
DAT2
CD/DAT3
CMD
VDD
CLK
VSS
DAT0
DAT1
CD
GND
POWER ON/OFF MANAGEMENT
VIN
U1
AM01B_W
PWR_EN
C1
STC3ME30-T1_C22468123
TOUCH_KEY
OUT TBM
GND VDD
KEY VGM
C2 100nF
GND
DCDC
VIN
MCU_3V3
Q1
AO3401A_C306862
VBAT
VBUS
U3
TLV62569DBVR
U6 2.2uH
VIN
SW
GND
FB
EN
C6 10uF
C5 100nF
R5 100kΩ
R6 22.1kΩ
R1 10MΩ
C4 10uF
PWR_EN
GND
MCU_3V3
C7 10uF
C9 10uF
C10 10uF
BAT MANAGE
U7
BQ27220YZFR
R8 100kΩ
R7 10kΩ
VBAT
BAT_SDA
BAT_SCL
10MΩ
R9
VBAT
VBAT_IN
A1 GPOUT
A2 SDA
A3 SCL
C1 SRP
C2 SRN
C3 BAT
B1 BIN
B2 VSS
B3 VDD
C15 1uF
C8 2.2uF
GND
CHIP_PU
SW2
HX TS-1088-AR02016
POWER_CTRL
VCC_3V3
MCU_3V3
Q2
AO3401A_C306862
R10 10kΩ
ESP_BOOT
SW3
HX TS-1088-AR02016
R22 10kΩ
VBAT
VIN
VBUS
D2
D1
1N5819WS S4
1N5819WS S4
C16 10uF
VERTICAL STATUS LED
U8
SK6805SIDE-G-001
DOUT
VSS
VDD
DIN
LED_DIN
VCC_3V3
0Ω
R13
ESP32-S3
MCU_3V3
R26 2.2kΩ
R27 2.2kΩ
BAT_SCL
TOUCH_SCL
TEMP_SCL
ESP32_SCL
ESP32_SDA
TEMP_SDA
TOUCH_SDA
BAT_SDA
C12 10uF
C3 100nF
GND
U4
ESP32-S3-WROOM-1(N16R8)
MCU_3V3
R14 10kΩ
CHIP_PU
C14 1uF
GND
CHIP_PU
HSPI_SCK
HSPI_MOSI
HSPI_MISO
VS1053_XDCS
VS1053_DREQ
VS1053_RESET
VS1053_XCS
EINK_DC
LED_DIN
USB_DN
USB_DP
GND
3V3
EN
IO4
IO5
IO6
IO7
IO15
IO16
IO17
IO18
IO8
IO19
IO20
IO3
IO46
IO9
IO10
IO11
IO12
IO13
IO14
IO21
IO47
IO48
IO45
GND
IO1
IO2
TXD0/GPIO43
RXD0/GPIO44
IO42
IO41
IO40
IO39
IO38
IO37
IO36
IO35
IO0
ESP32_SCL
ESP32_SDA
U0TXD
U0RXD
VSPI_MISO
VSPI_MOSI
VSPI_SCK
POWER_CTRL
EINK_CS
ESP_BOOT
GND
VCC_3V3
R29 10kΩ
R28 1kΩ
TOUCH_INT
TOUCH_RESET
EINK_RESET
EINK_BUSY
SD_CLK
SD_DAT0
SD_CD
SD_CMD
USB-C
GND
VBUS
VBUS_IN
D10
1N5819WS S4
USBC3
TYPE-C-31-M-12
VBUS_IN
USB_DP
USB_DN
R11 5.1kΩ
R12 5.1kΩ
D3
D4
D5
LESD5D5.0CT1G
LESD5D5.0CT1G
LESD5D5.0CT1G
BAT CHARGE
VBUS
U2
TP4057-MS
R3 1kΩ
R4 1.5kΩ
CHRG
PROG
GND
STDBY
BAT
VCC
VBAT
STDBY
VBUS
C13 10uF
C11 10uF
CHRG
STDBY
R15 4.7kΩ
R2 4.7kΩ
U5
A-SP1102DR6GHC-C01-2C
VBUS
GND
TOUCH_FTP
GND
VCC_3V3
TOUCH_RESET
TOUCH_INT
TOUCH_SDA
TOUCH_SCL
FPC1
AFC01-S06FCA-00
EINK_FTP
VCC_3V3
R41 10kΩ
BS
R46 0Ω
GND
U13
47uH
C47 4.7uF
C46 4.7uF
D16
MBR0530T1G_C7436545
PREVGL
D12
MBR0530T1G_C7436545
D13
MBR0530T1G_C7436545
PREVGH
C45 1uF
GDR
Q3
SI1308EDL
RESE
R36 1MΩ
R37 2.2Ω
C35 4.7uF
C36 4.7uF
GDR
RESE
TEMP_SCL
TEMP_SDA
BS
EINK_BUSY
EINK_RESET
EINK_DC
EINK_CS
VSPI_SCK
VSPI_MOSI
EINK_3.3V
C37 1uF
C38 1uF
C39 1uF
C42 1uF
PREVGH
C43 1uF
PREVGL
C44 1uF
EINK_VCOM
FPC2
AFC01-S24FCA-00
GND
VCC_3V3
GND
TITLE:
Sheet_1
REV: 1.0
Company: Your Company
Sheet: 1/1
Date: 2025-12-01
Drawn By: SIRMELON
EasyEDA
VBAT
GND
CN1
1.25-2PLT